

C¹ (d) a nucleic acid molecule encoding a fragment of the amino acid sequence of SEQ ID NO:4 having disintegrin activity and comprising amino acids 532 through 586 of SEQ ID NO:4.

C² 31 (amended). A nucleic acid molecule encoding a fusion protein comprising a fragment of the polypeptide of SEQ ID NO:4 having disintegrin activity and a heterologous polypeptide; wherein the fusion protein comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4.

32 (amended). The nucleic acid molecule of claim 31 wherein the fusion protein comprises amino acids 532 through 586 of SEQ ID NO:4.

C³ 34 (amended). An isolated nucleic acid molecule that encodes a polypeptide having disintegrin activity and sharing at least 80 percent amino acid identity across the length of amino acids 496 through 599 of SEQ ID NO:4.

35 (amended). The isolated nucleic acid of claim 34 encoding a polypeptide having disintegrin activity and sharing at least 90 percent amino acid identity across the length of amino acids 496 through 599 of SEQ ID NO:4.

C⁴ 38 (amended). An isolated nucleic acid molecule that encodes a fragment of ADAM23 having disintegrin activity, wherein ADAM23 is the polypeptide of SEQ ID NO:4, and wherein the fragment of ADAM23 comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4, and amino acids 532 through 586 of SEQ ID NO:4.

C⁵ 40 (amended). The nucleic acid of claim 38 wherein the fragment of ADAM23 comprises amino acids 532 through 586 of SEQ ID NO:4.

Please add the following new claims 47-49:

47 (NEW). A nucleic acid molecule encoding a fusion protein comprising a fragment of the polypeptide of SEQ ID NO:4 having disintegrin activity and a heterologous polypeptide; wherein the fusion protein comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4; and wherein the fusion protein comprises a heterologous polypeptide selected from the group consisting of an Fc polypeptide, a peptide linker, and/or a leucine zipper polypeptide.

48 (NEW). An isolated nucleic acid molecule that encodes a fragment of ADAM23 having disintegrin activity and further comprises an ADAM23 pro domain amino acid sequence, wherein ADAM23 is the polypeptide of SEQ ID NO:4, and wherein the fragment of ADAM23 comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4; and wherein the ADAM23 pro domain amino acid sequence comprises amino acids 58 through 286 of SEQ ID NO:4.

49 (NEW). An isolated nucleic acid molecule that encodes a fragment of ADAM23 having disintegrin activity and further comprises an ADAM23 catalytic domain amino acid sequence, wherein ADAM23 is the polypeptide of SEQ ID NO:4, and wherein the fragment of ADAM23 comprises an amino acid sequence selected from the group consisting of amino acids 496 through 599 of SEQ ID NO:4 and amino acids 532 through 586 of SEQ ID NO:4; and wherein the ADAM23 catalytic domain amino acid sequence comprises amino acids 286 through 495 of SEQ ID NO:4.

REMARKS

These remarks are in response to the Office Action mailed November 4, 2002.

Claims 33, 37, 39, 41, and 43 have been canceled without prejudice to Applicant's right to prosecute the canceled subject matter in any divisional, continuation, continuation-in-part, or other application.